

Work Order ID 59197

Friday, May 28, 2010 9:16:36 AM



Page 1

Item ID: D3953-17

Accept



Setup Start



Revision ID:

Item Name: Gas Spring Spacer

Stop



Start Date: 5/27/2010 Start Qty: 20.00



Cust Item ID:

Required Date: 6/4/2010 Req'd Qty: 20.00



Customer:

Reference:

Approvals:

Process Plan:



Date: 10-5-28 Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberReject
NumberInsp.
Stamp

Draw Nbr	Revision Nbr
D3953	C

100



Waterjet

FLOW CNC Waterjet

375 X300

Memo

0.00

HB 10-6-3

1-Cut as per Dwg D3953

Dwg Rev: CProg Rev: C

2-Drill holes as per dwg

3-Deburr if necessary

⇒ m-f 10/06/08

30X

30

110



QC2- Inspect parts off machine FAI/FAIB

0.00

HB 10-6-3

QC

Quality Control

Memo

0.00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

120



QC

Quality Control

Operation
Description

QC8- Inspect parts - second check

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

S w66 log

center
130

130



Small Fab

Small Fab

Memo

1- OPEN HOLES AS PER DWG

0.00

2- DEBURR IF NECESSARY

0.00

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

u/48

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Cust Item ID:

Required Date: 6/4/2010 Req'd Qty: 20.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
Description

150

Identify as per dwg & Stock Location: 103

Packaging

Packaging

Set Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

x30 BB10/06/09

160



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/06/10 JJMF
10-6-10

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Picklist Print

Friday, May 28, 2010 9:16:41 AM

Page 1

Work Order ID: 59197



Parent Item: D3953-17



Parent Item Name: Gas Spring Spacer

Start Date: 5/27/2010

Required Date: 6/4/2010

Comments: IPP RevA: New issue DD verified by:EC
revC DD 10.03.02 verified by:EC

IPP Rev:B as per dwg

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch Purchased	Bin Item No	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty Otv	Qty Issued	Date Issued	Status
M304B0.375X03.000						100	f	2.7000	0.03125	0.657895			

M304 SS bar .375 x 3.00



Location

MAT53

Loc Qty

2.7

Loc Code

113679

2.7

113679

HB10-L-3
30

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DART AEROSPACE LTD	Work Order:	<u>59197</u>
Description: Gas Spring Spacer	Part Number:	<u>D3953-17</u>
Inspection Dwg: D3953 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Measured by:	FB	Audited by:	S	Prototype Approval:	N/A
Date:	10-6-3	Date:	10/06/06	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	09.10.22	New Issue	KJ	
B	09.12.14	Dwg Rev updated	KJ	 

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NOTE: Date & initial all entries

SHOP COPY

RETURN TO

ENGINEERING

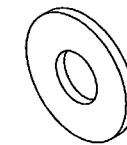
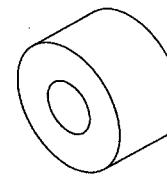
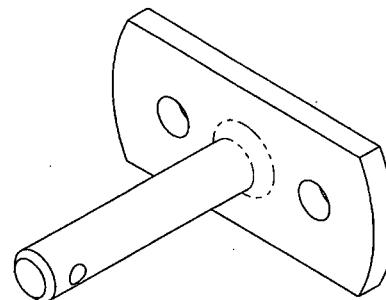
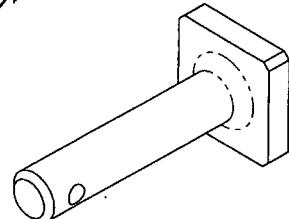
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SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 59197
BS 10-5-28



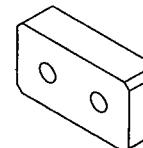
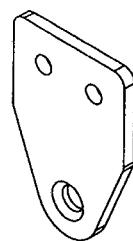
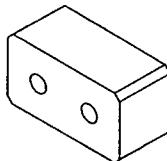
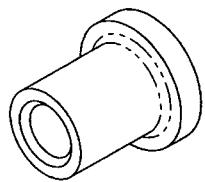
D3953-1 GAS SPRING BRACKET
(FULL LID)

D3953-3 GAS SPRING STUD, LID

D3953-5 GAS SPRING STUD, BASE

D3953-7 GAS SPRING SPACER

D3953-9 GAS SPRING WASHER



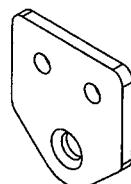
D3953-11 GAS SPRING SPACER

D3953-13 GAS SPRING SPACER
(FULL LID)

D3953-15 GAS SPRING BRACKET
(SPLIT LID)

D3953-17 GAS SPRING SPACER
(SPLIT LID)

D3953-19 GAS SPRING BRACKET
(SQUARE BASKET)



D3953-21 GAS SPRING BRACKET
(SQUARE BASKET)

C

C	PARTS -19 & -21 ADDED (SHT 18.4). CSK CALLOUT WAS CHAM (C6-2, B6-3, C6-4); C SYMM WAS C SYM ABOUT (C7-2, C7-4). SECTION C-C REPOSITIONED TO B2-4. REASON: ADDL PARTS REQD; DRAFTING ERRORS	JPH	10.01.29
B	SHEET 3 ZONE C1 DIM 0.05 MIN WAS 0.13. MULTIPLE DIMENSIONS MINMAX REMOVED; TOLERANCE ADDED. REASON: DIFFICULTY INSTALLING COTTER PIN AT NEXT ASSY.	AJS	09.11.11
A	NEW ISSUE	AJS	09.07.27
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	JPH	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DD	REV. C	
MFG. APPR.	BB	DRAWING NO.	
APPROVED	AA	D3953	SHEET 1 OF 4
DE APPR.	AA	TITLE	SCALE
DATE	10.01.29	GAS SPRING LID COMPONENTS NTS	

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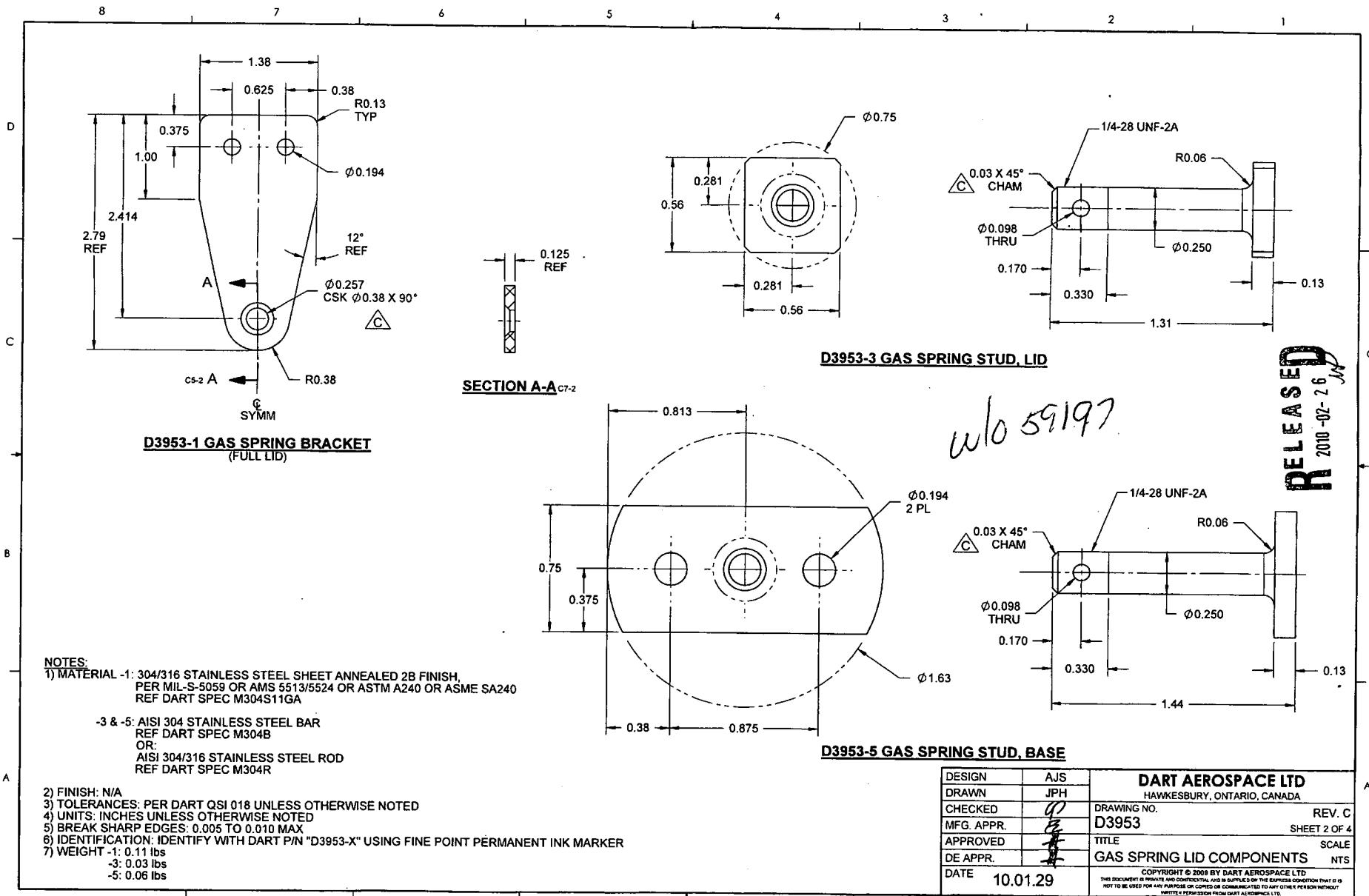
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DRAWN	JPH	HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>PP</i>	DRAWING NO.
MFG. APPR.	<i>BB</i>	REV. C
APPROVED	<i>BB</i>	SHEET 2 OF 4
DE APPR.	<i>BB</i>	TITLE
DATE 10.01.29		SCALE
		GAS SPRING LID COMPONENTS NTS

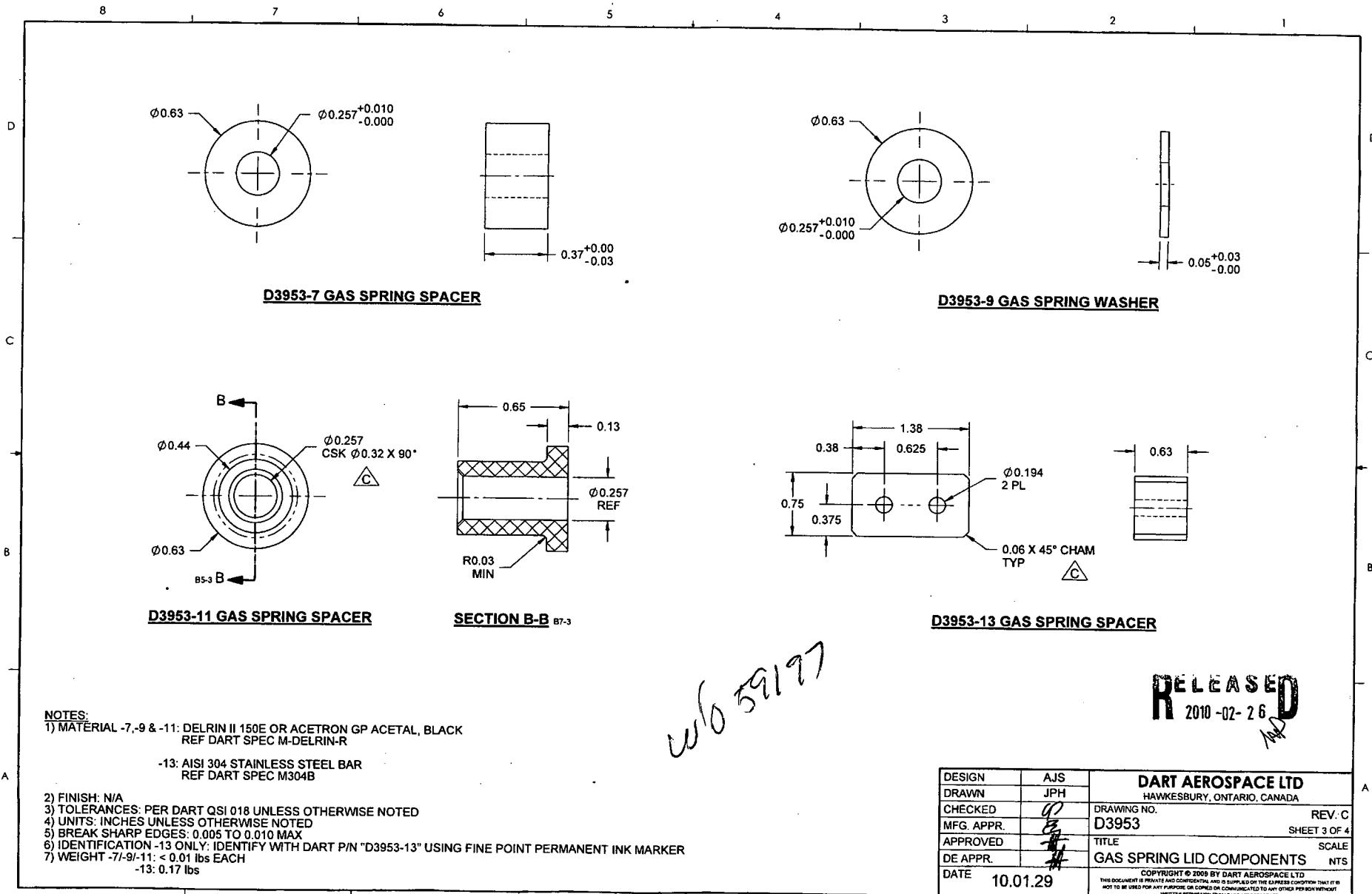
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DRAWN	JPH	HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>PP</i>	DRAWING NO. REV. C
MFG. APPR.	<i>E</i>	D3953 SHEET 3 OF 4
APPROVED	<i>PP</i>	TITLE
DE APPR.	<i>PP</i>	SCALE
DATE	10.01.29	GAS SPRING LID COMPONENTS NTS

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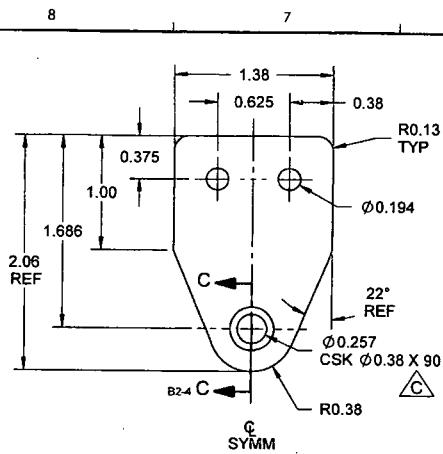
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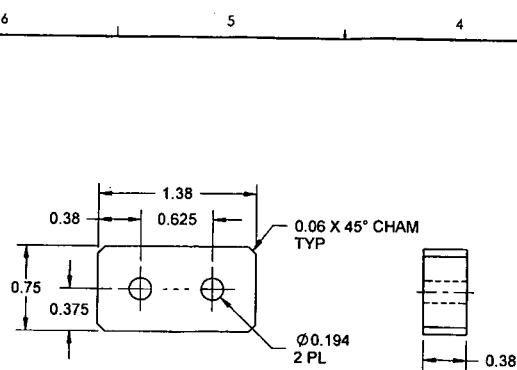
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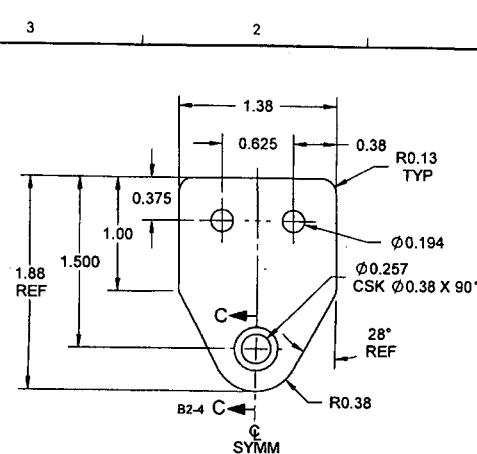
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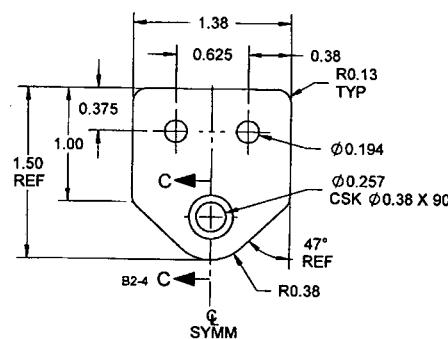
D3953-15 GAS SPRING BRACKET
(SPLIT LID)



D3953-17 GAS SPRING SPACER
(SPLIT LID)



D3953-19 GAS SPRING BRACKET
(SQUARE BASKET)



D3953-21 GAS SPRING BRACKET
(SQUARE BASKET)

NOTES:

- 1) MATERIAL -15/-19-21: 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240 REF DART SPEC M304S11GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3953-X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT -15: 0.08 lbs
-17: 0.10 lbs
-19: 0.07 lbs
-21: 0.06 lbs

SECTION C-C RELEASED 2010-02-26

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DESIGN	AJS
DRAWN	JPH
CHECKED	
MFG. APPR.	
APPROVED	
DE APPR.	
DATE	10.01.29

DRAWING NO. D3953 REV. C
SHEET 4 OF 4
TITLE
SCALE
GAS SPRING LID COMPONENTS NTS

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W0591A1

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